What is claimed is:

1. A gc chain blocking agent that is selected from the group consisting of a soluble gc-binding polypeptide, a soluble gc-blocking polypeptide, or a soluble gc mimetic agent.

2. A gc blocking agent characterized as having the property of significantly blocking a response of a cell of a mammal to interleukin-2 (IL-2), wherein said blocking occurs without any requirement for a second compound which affects response of the cell to IL-2.

3. The gc blocking agent of claim 2, wherein the required second compound is an antibody.

4. The gc blocking agent of claim 3, wherein the required second compound is an antibody specific to an antigenic determinant of a human IL-2 receptor chain.

5. The gc blocking agent of claim 2, wherein the agent interacts with IL-2 receptor chain of a different species of mammal.

6. The gc blocking agent of claim 2, wherein the agent is a monoclonal antibody that cross competes with monoclonal antibody CP.B8 produced by hybridoma cell line ATCC No. HB-12107 for binding to gc chain, and also cross competes with Fab, $F(ab')_2$, and Fv fragments and conjugates of said CP.B8.

7. The gc blocking agent of claim 2, wherein the agent is a monoclonal antibody that cross competes with monoclonal antibody CQ.C11 produced by hybridoma cell line ATCC No. HB-12105 for binding to gc chain, and also cross competes with Fab, $F(ab')_2$, and Fv fragments and conjugates of said CQ.C11.

8. The gc blocking agent of claim 2, wherein the agent is a monoclonal antibody that cross competes with monoclonal antibody AF.F4 produced by hybridoma cell line ATCC No. HB-12104 for binding to gc chain, and cross competes Fab, $F(ab')_2$, and Fv fragments and conjugates of said AF.F4.

9. The gc blocking agent of claim 2, wherein the agent is a monoclonal antibody that cross competes with the monoclonal antibody AE.C9 produced by hybridoma cell line ATCC No. HB-12106 for binding to gc chain, and cross competes with Fab, $F(ab')_2$, and Fv fragments and conjugates of said AE.C9.

10. The gc blocking agent of claim 2, wherein the agent is a monoclonal antibody that cross competes with the monoclonal antibody AK.F12 produced by hybridoma cell line ATCC No. _____ for binding to gc chain, and cross competes with Fab, $F(ab')_2$, and Fv fragments and conjugates of said AK.F12.

11. The gc blocking agent of claim 2, wherein the agent is a monoclonal antibody comprising CP.B8 or comprising a Fab fragment of CP.B8..

12. The gc blocking agent of claim 2, wherein the agent is a monoclonal antibody that is human, humanized, primatized, or chimerized.

13. The gc blocking agent of claim 2, wherein the agent is a monoclonal antibody further characterized as being able to block a response of a cell to a cytokine that is different from IL-2.

14. The monoclonal antibody of claim 13, wherein the different cytokine is selected from the group consisting of interleukin-4 (IL-4), IL-7, IL-9 and IL-15.

15. The monoclonal antibody of claim 13, wherein the monoclonal antibody is capable of significantly blocking a response of a cell to IL-2, IL-4, and IL-7.

16. The monoclonal antibody of claim 13, wherein the monoclonal antibody is capable of significantly blocking a response of to IL-2, IL-4, IL-7, IL-9 and IL-15.

17. A continuous hybridoma cell line selected from the group consisting of ATCC No. HB-12107, ATCC No. HB-12105, ATCC No. HB-12104, ATCC No. HB-12106, add ATCC No. _____.

18. A monoclonal antibody produced by hybridoma cell line selected from the group consisting of ATCC No. HB-12105, ATCC No. HB-12104, ATCC No. HB-12106, and ATCC No. _____.

19. A polynucleotide selected from the group of sequences consisting of:

(a) SEQ ID NOS.: 5 and 6;

(b) a polynucleotide that hybridizes to any of the foregoing sequences under standard hybridization conditions and that encodes at least part of a polypeptide having the property of significantly blocking a response of a cell to interleukin-2 (IL-2); and

(c) a polynucleotide that encodes a protein encoded by any of the foregoing polynucleotide sequences.

20. A gc chain binding agent that includes a polypeptide sequence encoded by the polynucleotide sequence of claim 19.

21. A monoclonal antibody having complementarity determining regions (CDRs) encoded by a polynucleotide sequence selected from the group consisting of:

(a) SEQ ID NO.: 5 and 6;

(b) a polynucleotide that hybridizes to any of the foregoing sequences under standard hybridization conditions; and

(c) a polynucleotide that encodes a protein encoded by any of the foregoing polynucleotide sequences.

22. A gc blocking agent that is an antibody having a light chain variable region CDR with an amino acid sequence selected from the group consisting of : (a) amino acids 24 to 34 of SEQ ID NO: 4; (b) amino acids 50 to 56 of SEQ ID NO: 4 and (c) amino acids 89 to 97 of SEQ ID NO:4.

23. A gc blocking agent of claim 2 that is an antibody having a having a heavy chain variable region CDR with an amino acid sequence selected from the group consisting of: (a) amino acids 28 to 32 of SEQ ID NO:3; (b) amino acids 47 to 61 of SEQ ID NO: 3 and (c) amino acids 95 to 104 of SEQ ID NO: 3.

24. A gc blocking agent that can bind to an epitopic sequence of human gc chain, the epitopic sequence selected from the group consisting of : (a) SEQ ID NO: 13; (b) SEQ ID NO 14; (c) SEQ ID NO. 15; (d) SEQ ID NO: 16; (e) SEQ ID NO 17 and (f) any combination of the foregoing sequences.

25. A pharmaceutical composition which comprises a gc-blocking agent.

26. The composition of claim 25, wherein the agent is selected from the group consisting of a gc-blocking antibody homolog, a soluble gc-binding polypeptide, a soluble gc-blocking polypeptide, and a soluble gc mimetic agent.

27. The agent of claim 26 that is a monoclonal antibody that specifically binds to an antigenic determinant of the gc chain of cytokine receptors.

28. The monoclonal antibody of claim 27 comprising CP.B8

29. A method of raising an antibody against a protein antigen comprising administering an immunogen to a mammal that is a non-denatured form of protein antigen.

30. The method of claim 29, wherein the protein antigen comprises at least a portion of gc chain.

31. The method of claim 30, wherein the non-denatured form of said at least a portion of gc chain comprises a fusion molecule that includes said at least a portion fused to at least part of an immunoglobulin constant region.

32. The method of claim 29, further comprising coadministering the non-denatured form of the protein antigen with protein A.

33. The method of claim 29, wherein the non-denatured form of protein antigen is noncovalently bound to a nondenaturing adjuvant.

34. A method for inhibiting functioning of the gc chain, comprising the step of contacting a cell with a the gc-blocking agent of claim 1, in an amount sufficient to inhibit cellular responses to a cytokine.

35. A method for inhibiting functioning of the gc chain, comprising the step of contacting a cell with the gc blocking agent of claim 2, in an amount sufficient to inhibit cellular responses to at least IL-2.

36. The method of claim 35, where the gc blocking agent is an antibody homolog that specifically binds to an antigenic determinant of the gc chain of cytokine receptors.

37. The method of claim 36, wherein the monoclonal antibody comprises CP.B8.

38. A method for treating or reducing the advancement, severity or effects of an immunological disease in a subject comprising the step of administering a composition which includes a gc-blocking agent

39. The method of claim 38, wherein the blocking agent is selected from the group consisting of a gc-blocking antibody homolog, a soluble gc-binding polypeptide, a soluble gc-blocking polypeptide, and a soluble gc mimetic agent.

40. The method of claim 39, where the gc blocking antibody homolog is a monoclonal antibody that specifically binds to an antigenic determinant of the gc chain of cytokine receptors.

41. The method of claim 40, wherein the monoclonal antibody comprises CP.B8.

42. The method of claim 38, wherein the subject is a mammal.

43. The method of claim 38, wherein the immunological disease is selected from the group consisting of myasthenia gravis, IBD, rheumatoid arthritis, lupus, multiple sclerosis, insulin-dependent diabetes, sympathetic ophthalmia, uveitis, allergy, asthma, parasitic disease, graft versus host disease (GVHD), and psoriasis.

44. A method for inducing T-cell anergy comprising the step of administering to a population of T cells a composition which comprises a a gc-blocking agent.

45 The method of claim 44, wherein the blocking agent is selected from the group consisting of a gc-blocking antibody homolog, a soluble gc-binding polypeptide, a soluble gc-blocking polypeptide, and a soluble gc mimetic agent.

46. The method of claim 45, where the gc blocking antibody homolog is a monoclonal antibody that specifically binds to an antigenic determinant of the gc chain of cytokine receptors.

47. The method of claim 46, wherein the monoclonal antibody comprises CP.B8.

48. A method for inhibiting function of a human cellular receptor, comprising the step of contacting the receptor with a noncompetitive inhibitor of the cellular receptor.

49. The method of claim 48, wherein the noncompetitive inhibitor is a gc-blocking agent.

50. The method of claim 49, wherein the noncompetitive inhibitor is a gc blocking agent that noncompetitively blocks either IL-2 or IL-4.

51. The method of claim 50, wherein the gc blocking agent is mAb CP.B8.

52. A method for treating or reducing the advancement, severity or effects of an immunological disease in a subject comprising the step of administering a noncompetitive inhibitor of a cellular receptor.

53. The method of claim 52, wherein the noncompetititve inhibitor is a gc-blocking agent.

54. The method of claim 53, wherein the noncompetitive inhibitor is a gc blocking agent that noncompetitively blocks either IL-2 or IL-4.

55. The method of claim 54, wherein the gc blocking agent is mAb CP.B8.

56. The method of claim 52, wherein the immunological disease does not respond to treatment by an inhibitor which acts competitively with respect to said cellular receptor.

57. A method of identifying a compound that non-competitively inhibits functioning of a cytokine receptor, comprising demonstrating that a capacity of the compound to inhibit the function is not competitively inhibited by high concentrations of cytokine.

58. The method of claim 57, wherein the cytokine receptor utilizes gc as one of its receptor components.